

### **Amendments to the Claims**

Claim 1 (**Currently Amended**) A droplet operation device for biological and/or medical analysis comprising:

an insulating substrate;

a plurality of electrode units arranged on the insulating substrate, the electrode units for controlling movement and stoppage of a droplet;

an insulating layer covering an upper surface of each of the electrode units, the upper surface being opposite to a lower surface of each of the electrode units that is in contact with the insulating substrate;

a unit that supplies the droplet onto a surface of the insulating layer;

a unit that applies an electric field to the electrode units so as to control the droplet on the surface of the insulating layer; and

a unit that measures a state of the droplet,

wherein the surface of the insulating layer is water repellent.

Claim 2 (**Original**) The droplet operation device according to claim 1, further comprising a unit that optically and telescopically measures an internal state of the droplet.

Claim 3 (**Original**) The droplet operation device according to claim 1, further comprising a unit that measures absorbance of the droplet.

Claim 4 (**Original**) The droplet operation device according to claim 1, further comprising a unit that measures fluorescence intensity of the droplet.

Claim 5 (**Original**) The droplet operation device according to claim 1, further comprising a unit that mixes a plurality of droplets.

Claim 6 (**Previously Presented**) The droplet operation device according to claim 1, wherein the droplet contains a cell or a microbe.

Claim 7 (**Previously Presented**) The droplet operation device according to claim 2, wherein the droplet contains a cell or a microbe.

Claim 8 (**Previously Presented**) The droplet operation device according to claim 3, wherein the droplet contains a cell or a microbe.

Claim 9 (**Previously Presented**) The droplet operation device according to claim 4, wherein the droplet contains a cell or a microbe.

Claim 10 (**Previously Presented**) The droplet operation device according to claim 5, wherein the droplet contains a cell or a microbe.

Claim 11 (**New**) The droplet operation device according to claim 1, wherein  
the surface of the insulating layer has a groove, and  
the unit that supplies the droplet onto the surface of the insulating layer supplies the droplet to the groove on the surface of the insulating layer.